

**IN THE SPECIFICATION**

1. Please amend the paragraph starting on page 15, line 13 of the application as follows:

FIGURE [[2B]] 2A illustrates the forward filter update portion of the block decision feedback equalizer according to one embodiment of the present invention, viewed as a filtering operation. The forward filter 200, corresponding to equation (7a), computes the second term within equation (7a), a differential forward filter update term  $\Delta \bar{\mathbf{h}}_f = \sum_{i=1}^N e_{n-i} \bar{\mathbf{x}}_{n-i}^T$  for the N samples within the subject block. The filter starts with an initial state  $[x(n-1) \dots x(n-N)]$ , with buffers 201a-201x holding the N samples received for the subject block. When the corresponding error vector  $[e(n-1) \dots e(n-N)]$  has only one element for each sample, equation (7a) reduces to a sample-by-sample decision feedback equalizer update equation. Accordingly, signal multipliers 202a-202x multiply each sample within the block by the corresponding error vector element. The results are then added by summing unit 203, producing the differential forward filter update term.

2. Please amend the paragraph starting on page 19, line 13 of the application as follows:

FIGURE 2C is a block diagram of the overall structure of a block exact decision feedback equalizer according to one embodiment of the present invention. Block exact decision feedback equalizer (BE-DFE) 208 includes an input  $x(n)$ , which are passed to forward filter 200. The output of forward filter 200 is added by signal adder 210 to the outputs of feedback filter 211 and intra-block time varying filters 212a and 212b. The output of signal adder 210 is passed to constellation demapping unit 213 and to sample error computation unit 214. Sample error computation unit 214 also receives the demapped samples  $d(n)$  from demapping unit 213. Coefficient update units 215a and 215b compute the error vectors for forward filter 200 and feedback filter 211, respectively.